



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**Region 6 Laboratory**

Environmental Services Branch  
10625 Fallstone Road, Houston, TX 77099  
Phone: (281)983-2100 Fax: (281)983-2248

**Final Analytical Report**

Site Name -----Oil Trust Fund  
Sample Collection Date(s)-- 07/29/10  
Contact----- Rich Mayer (6PD-F)  
Report Date-----08/03/10  
Project #----- 10REG213  
Work Order(s)-----1007039

**Analyses included in this report:**

LC DOSS

**Report Narrative**

Sample Management:

The analysis of samples 1007039-01 through 1007039-04 was cancelled because they were listed in the pre-log files but were not received by the laboratory.

DOSS:

DOSS was not found in the samples at or above the reporting limit.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

Report Approvals:

\_\_\_\_\_  
Richard McMillin  
Region 6 Laboratory Manager

\_\_\_\_\_  
David Neleigh  
Region 6 Laboratory Branch Chief



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road  
Houston, Texas 77099

## Sample Receipt and Disposal

Site Name: Oil Trust Fund

Project Number: 10REG213

Data Management Coordinator: Christy Warren

\_\_\_\_\_  
Data Management Coordinator Signature

\_\_\_\_\_  
Date

Date Transmitted: \_\_\_\_/\_\_\_\_/\_\_\_\_

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren  
Data Management Coordinator  
Region 6 Laboratory  
6MD-HS

\_\_\_\_\_  
Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Please provide a reason for holding:



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**ANALYTICAL REPORT FOR SAMPLES**

| Station ID            | Laboratory ID | Sample Type | Date Collected | Date Received  |
|-----------------------|---------------|-------------|----------------|----------------|
| T005-0012-100729-SW-1 | 1007039-05    | Liquid      | 7/29/10 9:50   | 07/30/10 09:40 |
| T005-0013-100729-SW-1 | 1007039-06    | Liquid      | 7/29/10 10:25  | 07/30/10 09:40 |
| T005-0014-100729-SW-1 | 1007039-07    | Liquid      | 7/29/10 10:50  | 07/30/10 09:40 |
| T005-0015-100729-SW-1 | 1007039-08    | Liquid      | 7/29/10 11:25  | 07/30/10 09:40 |
| T007-0005-100729-SW-1 | 1007039-09    | Liquid      | 7/29/10 9:15   | 07/30/10 09:40 |
| T007-0006-100729-SW-1 | 1007039-10    | Liquid      | 7/29/10 9:55   | 07/30/10 09:40 |
| T007-BG06-100729-SW-1 | 1007039-11    | Liquid      | 7/29/10 12:05  | 07/30/10 09:40 |



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-05**

**Station ID: T005-0012-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 24 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 181            |                       | 109       | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                            | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|-------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diocetyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 19.6               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-06**

**Station ID: T005-0013-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 23 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 179            |                       | 103       | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 20.0               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-07**

**Station ID: T005-0014-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 22 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 177            |                       | 97.3      | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 20.0               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-08**

**Station ID: T005-0015-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 23 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 187            |                       | 108       | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 20.0               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-09**

**Station ID: T007-0005-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 24 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 162            |                       | 97.4      | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 19.6               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.





Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-10**

**Station ID: T007-0006-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 22 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 199            |                       | 109       | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 20.0               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS**

**Lab ID: 1007039-11**

**Station ID: T007-BG06-100729-SW-1**

Batch: B0G3001

Date Collected: 07/29/10

Sample Type: Liquid

Sample Volume: 22 ml

Sample Qualifiers:

**Surrogates**

| Analyte               | Result<br>µg/l | Analyte<br>Qualifiers | %Recovery | %Recovery<br>Limits | Prepared | Analyzed |
|-----------------------|----------------|-----------------------|-----------|---------------------|----------|----------|
| <i>Surr: DOSS-D34</i> | 187            |                       | 103       | 50-150              | 07/30/10 | 07/30/10 |

**Targets**

| Analyte (CAS Number)                           | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Dilution | Prepared | Analyzed |
|------------------------------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Diethyl sulfosuccinate, sodium salt (577-11-7) | U              |                       | 20.0               | 1        | 07/30/10 | 07/30/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS - Quality Control**

**Batch: B0G3001**

**Sample Type: Liquid**

**Blank (B0G3001-BLK1)**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Surrogates**

| ANALYTE               | Result<br>µg/l | Analyte<br>Qualifier | Spike<br>Level | %REC<br>Limits |
|-----------------------|----------------|----------------------|----------------|----------------|
| <i>Surr: DOSS-D34</i> | 205            |                      | 200            | 102 50-150     |

**Blank (B0G3001-BLK1)**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Targets**

| ANALYTE                             | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Spike<br>Level | RPD<br>RPD Limit |
|-------------------------------------|----------------|-----------------------|--------------------|----------------|------------------|
| Diethyl sulfosuccinate, sodium salt | U              |                       | 20.0               |                |                  |

**LCS (B0G3001-BS1)**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Surrogates**

| ANALYTE               | Result<br>µg/l | Analyte<br>Qualifier | Spike<br>Level | %REC<br>Limits |
|-----------------------|----------------|----------------------|----------------|----------------|
| <i>Surr: DOSS-D34</i> | 201            |                      | 200            | 100 50-150     |

**LCS (B0G3001-BS1)**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Targets**

| ANALYTE                             | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Spike<br>Level | %REC<br>Limits | RPD<br>RPD Limit |
|-------------------------------------|----------------|-----------------------|--------------------|----------------|----------------|------------------|
| Diethyl sulfosuccinate, sodium salt | 88.0           |                       | 20.0               | 87.5           | 101 50-150     |                  |



Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

**DOSS by LC/MS/MS - Quality Control**

**Batch: B0G3001**

**Sample Type: Liquid**

**Matrix Spike (B0G3001-MS1)**

**Source: 1007039-05**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Surrogates**

| ANALYTE               | Result<br>µg/l | Analyte<br>Qualifier | Spike<br>Level | %REC<br>Limits |
|-----------------------|----------------|----------------------|----------------|----------------|
| <i>Surr: DOSS-D34</i> | 187            |                      | 174            | 107 50-150     |

**Matrix Spike (B0G3001-MS1)**

**Source: 1007039-05**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Targets**

| ANALYTE                              | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Spike<br>Level | Source<br>Result | %REC<br>Limits | RPD<br>RPD Limit |
|--------------------------------------|----------------|-----------------------|--------------------|----------------|------------------|----------------|------------------|
| Diocetyl sulfosuccinate, sodium salt | 72.5           |                       | 20.0               | 76.1           |                  | 95.3 50-150    |                  |

**Matrix Spike Dup (B0G3001-MSD1)**

**Source: 1007039-05**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Surrogates**

| ANALYTE               | Result<br>µg/l | Analyte<br>Qualifier | Spike<br>Level | %REC<br>Limits |
|-----------------------|----------------|----------------------|----------------|----------------|
| <i>Surr: DOSS-D34</i> | 193            |                      | 174            | 111 50-150     |

**Matrix Spike Dup (B0G3001-MSD1)**

**Source: 1007039-05**

Prepared: 7/30/2010 Analyzed: 7/30/2010

**Targets**

| ANALYTE                              | Result<br>µg/l | Analyte<br>Qualifiers | Reporting<br>Limit | Spike<br>Level | Source<br>Result | %REC<br>Limits | RPD<br>RPD Limit |
|--------------------------------------|----------------|-----------------------|--------------------|----------------|------------------|----------------|------------------|
| Diocetyl sulfosuccinate, sodium salt | 76.4           |                       | 20.0               | 76.1           |                  | 100 50-150     | 5.26 30          |



10625 Fallstone Road, Houston, TX 77099

Fax: (281) 983-2248

Lab Phone: 281-983-2137

Sample Temp:  $1^{\circ}\text{C}$

Page 1 of 1

## CHAIN OF CUSTODY RECORD

R06\_DeepWater\_Chalmette

Contact Name: Kristie Warr

Contact Phone: 713-985-6636

No: T0033-100402-20100729-06

AirbillNo:

Lab: U.S. EPA Region 6 Laboratory

Lab Phone: 281-983-2137

[illegible]

Special Instructions:

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

| Items/Reason | Relinquished by    | Date    | Received by        | Date    | Time  | Items/Reason | Relinquished By    | Date            | Received by          | Date    | Time |
|--------------|--------------------|---------|--------------------|---------|-------|--------------|--------------------|-----------------|----------------------|---------|------|
|              | <i>[Signature]</i> | 7-29-10 | <i>[Signature]</i> | 7-29-10 | 16:30 |              | <i>[Signature]</i> | 7/29/10<br>9:40 | <i>Isaiah Harris</i> | 7/30/10 | 9:40 |
|              | <i>[Signature]</i> | 7-29-10 | <i>[Signature]</i> | 7/29/10 | 0230  |              |                    |                 |                      |         |      |
|              | <i>[Signature]</i> | 7/29/10 | <i>[Signature]</i> | 7/29/10 | 730   |              |                    |                 |                      |         |      |
|              | <i>[Signature]</i> | 7/29/10 | <i>[Signature]</i> | 7/29/10 | 925   |              |                    |                 |                      |         |      |

Sample Temp:  $1^{\circ}\text{C}$





Environmental Protection Agency  
**Region 6 Laboratory**

10625 Fallstone Road, Houston, TX 77099  
Phone:(281)983-2100 Fax:(281)983-2248

## Notes and Definitions

|      |                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------|
| A    | This sample was extracted at a single acid pH.                                                                         |
| HTS  | Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values. |
| AES  | Atomic Emission Spectrometer                                                                                           |
| CVAA | Cold Vapor Atomic Absorption                                                                                           |
| ECD  | Electron Capture Detector                                                                                              |
| GC   | Gas Chromatograph                                                                                                      |
| GFAA | Graphite Furnace Atomic Absorption                                                                                     |
| ICP  | Inductively Coupled Plasma                                                                                             |
| MS   | Mass Spectrometer                                                                                                      |
| NA   | Not Applicable                                                                                                         |
| NPD  | Nitrogen Phosphorous Detector                                                                                          |
| NR   | Not Reported                                                                                                           |
| TCLP | Toxicity Characteristic Leaching Procedure                                                                             |
| U    | Undetected                                                                                                             |
| #    | Out of QC limits                                                                                                       |

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds *per* square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.